

PILOT MENU

BREAKFAST

1 cup of coffee

1 piece of toast (20 g) with butter (15 g)

1 glass of orange juice (250 mL)

LUNCH

Spaghetti (90 g) with olive oil (10 g), aromatic herbs and mushrooms (40 g)

Fries with ketchup (75 g)

Lettuce (20 g) + arugula (10 g) + raisins (40 g) + tomato (30 g)

1 apple for dessert (50 g)

SNACK

2 muffins (30 g) + marmalade (5 g)

DINNER

Neapolitan pizza [wheat flour (50 g) + mozzarella (30 g) + tomato (25 g) + basil]

Aubergines (45 g) + honey (15 g).

Chocolate paste with hazelnuts for dessert (35 g)

QUESTIONS

1. Calculate the total amount of kilocalories and say whether it is enough or not.
2. What kind of deficiencies do you find? (justify your answer)
3. Make a balanced menu.

Use this link for your calculations:

http://www.bedca.net/bdpub/index_en.php

The following tables will help you to understand why it is important to get enough of some of the common vitamins and minerals, and lists the best food sources of these nutrients.

Vitamin	Function	Food Sources
Vitamin B1 (Thiamin)	Helps with energy production in your body.	Whole grains, enriched grains Liver, pork, dried beans, nuts and seeds
Vitamin B12 (Cobalamin)	Helps to make healthy blood cells. Low levels of vitamin B12 can cause a type of anemia. It keeps nerves working properly.	Milk, cheese, yogurt, fortified soy or rice beverages Meat, fish, poultry, liver, eggs, fortified soy products
Vitamin C	May help prevent cell damage and reduce risk for certain cancers, heart disease and other diseases. Helps heal cuts and wounds. Protects you from infections by keeping your immune system healthy. Increases the amount of iron your body absorbs from some foods.	Citrus fruits such as oranges, grapefruits and their juices, kiwi, strawberries, mangoes, papaya Red, yellow and green peppers, broccoli, Brussels sprouts, tomatoes, raw dark leafy vegetables
Vitamin A	Helps you to see in the day and at night. Keeps skin and other body parts healthy.	Liver, some fish Milk, cheese
Vitamin D	Increases the amount of calcium and phosphorus your body absorbs from foods. Deposits calcium and phosphorus in bones and teeth, making them stronger and healthier.	Milk, fortified soy and rice beverages, some fish, eggs, organ meats, fish liver oils
Vitamin E	Helps to maintain a healthy immune system and other body processes. Acts as an antioxidant and protects cells from damage.	Vegetable oils, avocados, leafy green vegetables. Wheat germ, sunflower seeds, some nuts, peanut butter

Mineral	Function	Common Food Sources
Calcium	Builds bones and teeth and helps keep them strong. Slows down bone loss as you get older. Helps muscles like your heart work properly.	Milk, cheese, yogurt. Canned sardines and salmon with the bones.
Iron	Carries oxygen to all parts of your body Prevents you from feeling tired.	Meat, fish, poultry, dried beans, peas, chickpeas, lentils, nuts and seeds, organ meats such as liver and heart
Magnesium	Keeps nerves and muscles strong Helps form bones and teeth	Spinach. Bran cereals and wheat germ. Dried beans, peas and lentils such as black, navy, chickpeas, nuts and seeds.
Potassium	Keeps fluids balanced in blood and tissue Helps in controlling blood pressure Allows nerves and muscles to work together.	Bananas, avocado, prune juice, tomato juice, orange juice. Milk, yogurt. Dried beans such as beans, chickpeas, lentils, beef, pork, fish, nuts and seeds such as pistachio, almonds, pumpkin, flax and sunflower seeds

1. If you were vegetarian you would suffer the lack of one specific vitamin.
2. What vitamin is it?
3. What symptoms would you show?
4. What could you do to resolve this deficiency?

Algunos casos clínicos.

PACIENTE 1

El paciente relata sentirse malhumorado habitualmente, debilidad y un cansancio superior al normal con dificultad respiratoria, aun realizando ejercicio de baja intensidad.

También refiere dolor de cabeza y dificultad para concentrarse o pensar.

A la exploración, el paciente presenta un color azulado en la esclerótica y color amarillento en la mucosa interior del párpado. También color pálido de la piel así como uñas de aspecto quebradizo.

Al pedirle que se incorpore, el paciente se siente mareado y relata que también esto suele sucederle.

PACIENTE 2

El paciente acude a su médico de cabecera con una fractura de antebrazo que no ha tenido origen en ningún golpe ni torcedura.

El paciente refiere sentir, desde hace un tiempo, dolor óseo en zona de la cadera. También refiere debilidad y entumecimiento muscular, así como espasmos de manos y pies.

PACIENTE 3

Se trata de un niño etíope, que presenta a la exploración los siguientes signos:

Una masa muscular escasa así como una escasa estatura y peso para su edad. Se observa igualmente un abdomen abultado (que protruye). Una exploración más exhaustiva revela hepatomegalia.

El niño se muestra apático y su madre refiere que se cansa mucho y que presenta episodios de irritabilidad

1. Trata de identificar las enfermedades que padecen estos pacientes.
2. Determina la relación que tienen con deficiencias dietéticas.
3. Propón las correcciones dietéticas que deben llevarse a cabo.